L/F
KANGAROO ISLAND

AUSTRALIAN POST OFFICE
ENGINEERING INSTRUCTION

AUTOMOTIVE PLANT
Mechanical Aids
CH 0207

PARSONS - 77

1. TYPE OF MACHINE.

   Excavator, trench; track mounted, bucket line.

2. GROUP CLASSIFICATION.

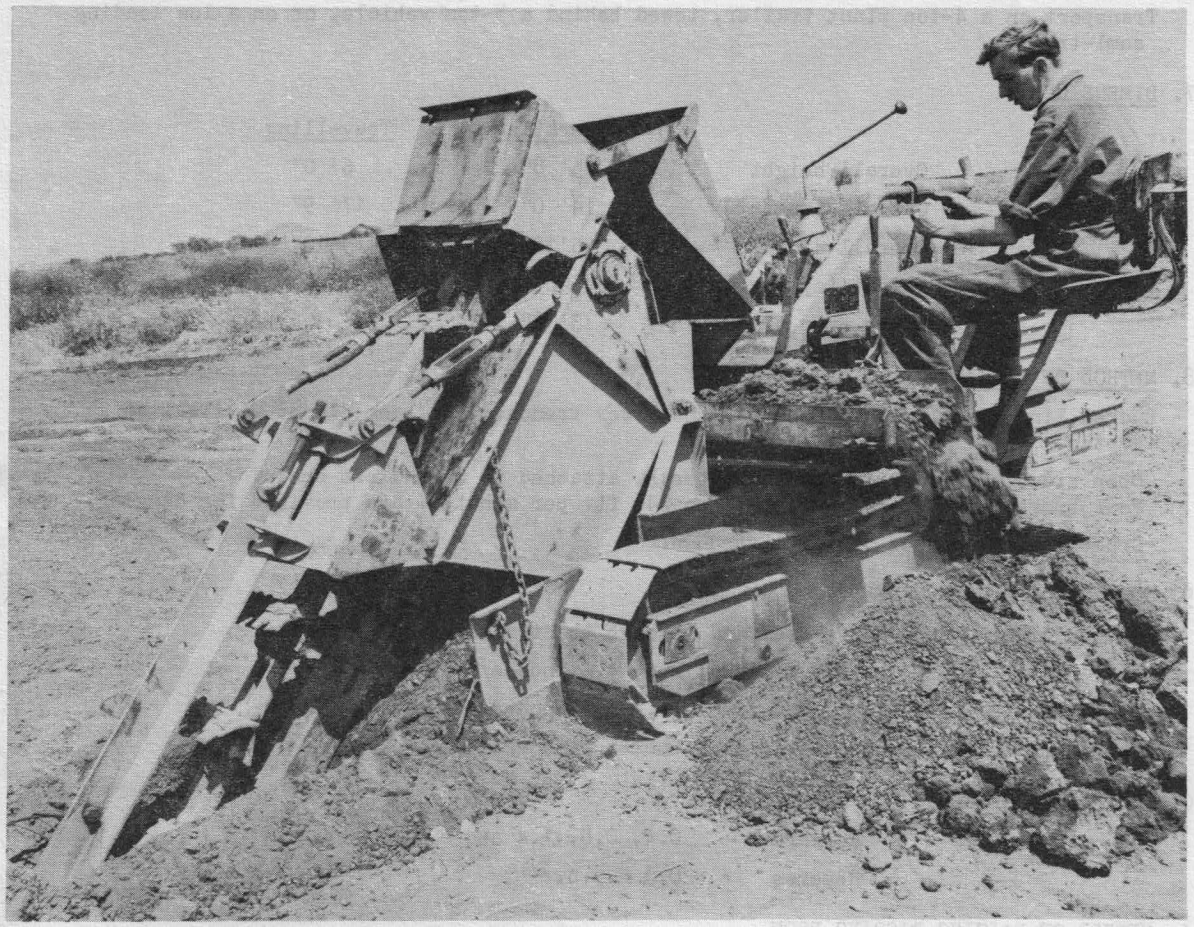

FIG. 1

3. MAKE AND MODEL.

   Parsons 77 Trenchliner.

4. DIGGING RANGE.

   Width of Trench - 6" to 16" in 2" steps.

   Depth of Trench - 5' in all widths.

   Minimum distance from centre line of trench to fence line - 2'0".

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5. DISPOSAL OF SPOIL.

Endless belt conveyor with direction of travel reversible to deliver to either side of machine as conditions dictate.

Conveyor, which can be moved sideways, delivers spoil 2'6" above ground level and from 2'11" to 4' from centre line of trench.

Four conveyor belt speeds are provided - from 75 to 480 ft./min. - directly regulated by speed of bucket line.

6. MOVEMENT BETWEEN JOBS.

Transport on a 4-ton plant trailer, towed behind a 5-ton vehicle, or on a low loading semi-trailer.

7. DIMENSIONS.

	Operating	Travelling
Overall height	5' 8"	6' 0"
Overall length	14' 0"	17' 9"
Overall width	5'10"	5'10"
Weight (approx.)	6,500 lbs.	
Width over tracks	3' 8"	

8. METHOD OF DIGGING.

Bucket line with inclined boom for shallower trenches and boom almost vertical at maximum depths.

Open sided buckets with renewable teeth, attached to an endless chain.
Four bucket line speeds - from 38 to 246 ft. per minute - are provided for digging.

Crumber bars scrapes bottom of trench.

9. CONTROL OF DIGGING SPEED.

Sixteen digging speeds are provided through the transmission gearboxes -

Minimum - 4.4 inches/minute.
Maximum - 181 inches/minute.

There are 4 digging speeds for each bucket line speed.

10. TRAVELLING SPEEDS.

Forward - 0.4, 0.8, 1.4 and 2.4 m.p.h.
Reverse - 0.3 m.p.h.

11. METHOD OF RAISING DIGGING BOOM.

Hydraulic ram and links, with positive down-crowd.

12. OPERATOR CONTROL.

From a seat on side of machine, with all controls within reach.

13. ENGINE.

Water cooled petrol.

END.